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| 29995 7590 04/02/2009 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614 | | | | |
| EXAMINER SAVAGE, JASON L | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/576,284

Applicant(s)

VRIES ET AL.

Examiner

JASON L. SAVAGE

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Double Patenting

Claims 1-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/578,796. Although the conflicting claims are not identical, they are not patentably distinct from each other because Application'796 recites a method of forming a coated workpiece comprising a substrate and electrodeposits one or more (emphasis added) layers containing at least one metal and/or metal alloy (claim 1). Application'796 further recites that as a coated metal alloy, aluminum/magnesium may be formed (claim 8).

Although Application'796 does not explicitly recite that an intermediate layer is provided, it teaches that one or more layers of a metal alloy are formed on the substrate which would meet the claim limitations.

Application'796 further recites that the substrate is electrically conductive (claim 3), it may be a metallic substrate or may be metallized (claim 4), the same substrate materials are used (claim 5), the same materials which may form an intermediate coating are used (claim 7), and the coating may be applied to the same workpiece components as claimed (claim 16).

Application'796 does not recite the aluminum/magnesium or intermediate layer thickness or the magnesium content in the aluminum/magnesium alloy such as recited in claims 6-8 of the instant Application, however the recited claim limitations would have been obvious.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-10 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Maeda et al (JP 10-298686 English Machine Translation).

Maeda teaches a coated nonferrous metal workpiece wherein an intermediate layer and outer coating layer of an aluminum/magnesium alloy is formed (abs.).

Regarding claims 2-3, the base metal substrate would be considered to be electrically conductive and made of metal.

Regarding claims 4 and 17, Maeda teaches the substrate may be a nonferrous metal such as a aluminum alloy (abs).

Regarding claim 5, Maeda teaches the intermediate layer may contain copper as well as some iron, tin and chromium (par[0010]).

Regarding claims 7-8, Maeda teaches the Al/Mg coating layer may have a thickness of 60 microns and magnesium content of 1.5% (par[0035]).

Regarding claims 9 and 18, the coated workpiece of Maeda would be considered a bulk material.

Regarding claim 10, Maeda would meet the claim limitations wherein the intermediate metal layer would be coated onto the substrate in some manner and the aluminum/magnesium alloy is coated on the intermediate metal layer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heller'762 (WO 2004/033762 using English Equivalent US 7,468,123).

Heller'762 teaches a coated metal workpiece wherein an aluminum/magnesium alloy is formed by electroplating for protecting the base metal from corrosion and/or providing a decorative coating (col. 1, ln. 27-31). Heller'762 teaches that such a coated metal workpiece advantageously do not employ a metallic intermediate layer as there is a risk of contact corrosion due to the coated intermediate layer as well as potential thermal expansion mismatches (col. 1, ln. 33-42).

While Heller'762 teaches that such an intermediate layer is desirably not formed, it is still a teaching that applying intermediate layers between the metal substrate and aluminum/magnesium alloy outer coating is known. Although the recited workpieces comprising such an intermediate layer were labeled as being having potential drawbacks, all the disclosures in a reference must be evaluated for what they fairly teach one of ordinary skill in the art even though the art teachings relied upon are phrased in terms of a non-preferred embodiment or even as being unsatisfactory for the intended purpose, In re Boe, 148 USPQ 507 (CCPA 1966); In re Smith, 65 USPQ 167 (CCPA 1945); In re Nehrenberg, 126 USPQ 383 (CCPA 1960); In re Watanabe, 137 USPQ 350 (CCPA 1963). As such, the disclosure of Heller'762 would make the claimed invention obvious as the claimed composite is known although it is also known to have potential drawbacks which may be undesirable.

Regarding claims 2-3, the base metal substrate would be considered to be electrically conductive and made of metal.

Regarding claims 4 and 17, Heller'762 teaches the substrate may be a nonferrous metal such as a aluminum alloy (col. 4, ln. 55 – col. 5, ln. 62).

Regarding claims 5-6, Heller'762 does not explicitly recite any particular intermediate layer composition or thickness, however it would have been obvious to one of ordinary skill to have selected a material and thickness which could minimize corrosion and thermal expansion mismatching between the substrate and coating layer. Absent a teaching of the criticality of the recited intermediate layer materials as claimed, they are considered to be a design choice which would not provide a patentable distinction over the prior art.

Regarding claims 7-8, Heller'762 teaches the Al/Mg coating layer may have a thickness of 14 and 18 microns and magnesium content between 23-25% (col. 5, ln. 1-33).

Regarding claim 9, the coated workpiece of Heller'762 would be considered a bulk material.

Regarding claim 10, Heller'762 would meet the claim limitations wherein the intermediate metal layer would be coated onto the substrate in some manner and the aluminum/magnesium alloy is coated on the intermediate metal layer.

Regarding claims 11-12, Heller'762 teaches coatings formed from electroplating solutions. As such, it would have been obvious to one of ordinary skill in the art to have formed an intermediate layer by electroplating.

Regarding claims 13-14, Heller'762 teaches that various electrolytes may be used to electrodeposit the aluminum/magnesium layer (col. 3, ln. 26-48).

Regarding claims 15-16, Heller'762 is silent to applying an electrically conductive layer prior to forming the intermediate layer such as by a metallization method. However, it would have been obvious to one of ordinary skill in the art at the time of the invention that additional layers could be provided in the composite of Heller'762 with a reasonable expectation of success such as to further minimize any thermal mismatch and/or provide improved corrosion resistance to the composite. Absent a teaching of the criticality or showing of unexpected results from recited claim limitations, it would not provide a patentable distinction over the prior art.

Regarding claim 18, Heller'762 teaches the workpieces may be bulk materials, wire, sheet metal, screws or nuts (col. 4, ln. 23-29).

Claims 6 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al (JP 10-298686 English Machine Translation).

Regarding claim 6, Maeda does not teach the intermediate layer has a thickness within the claimed range. However, it would have been obvious to one of ordinary skill to have selected a material and thickness to provide suitable corrosion resistance while limiting the amount of material and subsequent thickness of the layer. Absent a teaching of the criticality of the thickness of intermediate layer as claimed, it is considered to be a design choice which would not provide a patentable distinction over the prior art.

Regarding claims 15-16, Maeda is silent to applying an electrically conductive layer prior to forming the intermediate layer such as by a metallization method.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention that additional layers could be provided in the composite of Maeda with a reasonable expectation of success such as to form a thicker workpiece component. Absent a teaching of the criticality or showing of unexpected results from recited claim limitations, it would not provide a patentable distinction over the prior art.

Response to Arguments

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON L. SAVAGE whose telephone number is (571)272-1542. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Savage/
Examiner
3-23-09

/JENNIFER MCNEIL/
Supervisory Patent Examiner, Art Unit 1794